

KPDES



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

PERMIT NO.: KYG840000
AI NO.: 35050

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

Those non-coal (mineral) mining operations, which have obtained or are in the process of obtaining a Surface Disturbance Mining Permit from the Department for Natural Resources (DNR), pursuant to Chapter 350 of the Kentucky Revised Statutes (KRS) and Chapter 5 of Title 405 of the Kentucky Administrative Regulations (KARs). Those Devonian (oil) shale mining operations which are regulated under Chapter 30 of Title 405 are not eligible for coverage.

is authorized to discharge from a facility located at

Those non-coal (mineral) mining operations located within the 120 counties of the Commonwealth of Kentucky.

to receiving waters named

Those water bodies of the Commonwealth that comprise the Mississippi and Ohio River basins and sub-basins within the political and geographic boundaries of Kentucky.

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in PARTS I, II, III, IV, and V hereof. The permit consists of this cover sheet, and PART I 11 pages, PART II 6 page, PART III 3 page, PART IV 6 pages, and PART V 3 pages.

This permit shall become effective on July 1, 2007.

This permit and the authorization to discharge shall expire at midnight, June 30, 2012.

A handwritten signature in black ink, appearing to read "David W. Morgan", located below the permit text.

June 22, 2007
Date Signed

David W. Morgan, Director
Division of Water

Cheryl A. Taylor
Commissioner

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, Kentucky 40601
Printed on Recycled Paper

A1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: Controlled mine dewatering of limestone and dolomite operations

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	(lbs/day) Monthly Avg.	Daily Max.	Other Units Monthly Avg.	(Specify) Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	2/Month	Instantaneous
Total Suspended Solids (mg/l) (Quarry Water Only)	N/A	N/A	15	30	2/Month	Grab
Total Suspended Solids (mg/l) (Quarry and Wash Water)	N/A	N/A	20	40	2/Month	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Month	Grab

The pH of the effluent shall not be less than 6.0 standard units or greater than 9.0 standard units and shall be monitored 2/Month by grab sample.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

The abbreviation N/A means Not Applicable.

A2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: Controlled mine dewatering of clay, sand, gravel, fluorspar, and/or other vein mineral operations.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	(lbs/day) Monthly Avg.	Daily Max.	Other Units Monthly Avg.	(Specify) Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	2/Month	Instantaneous
Total Suspended Solids (mg/l)	N/A	N/A	40	80	2/Month	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Month	Grab

The pH of the effluent shall not be less than 6.0 standard units or greater than 9.0 standard units and shall be monitored 2/Month by grab sample.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

The abbreviation N/A means Not Applicable.

A3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: Precipitation influenced discharges from limestone, dolomite, clay, sand, gravel, fluorspar, and/or other vein minerals.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	(lbs/day) Monthly Avg.	Daily Max.	Other Units Monthly Avg.	(Specify) Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	2/Month	Instantaneous
Precipitation (inches)	N/A	N/A	Report	Report	2/Month	Grab
Settleable Solids (ml/l)	N/A	N/A	Report	0.5	2/Month	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Month	Grab

The pH of the effluent shall not be less than 6.0 standard units or greater than 9.0 standard units and shall be monitored 2/Month by grab sample.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

The abbreviation N/A means Not Applicable.

A4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: No discharge or recycling non-coal mineral mining operation.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	(lbs/day)	Other Units (Specify)		
	Monthly	Daily	Monthly	Daily
	<u>Avg.</u>	<u>Max.</u>	<u>Avg.</u>	<u>Max.</u>
			Measurement	Sample
			<u>Frequency</u>	<u>Type</u>

For those non-coal mineral mining operations that direct all waters including stormwater runoff, dredge return water, etc., to the pit, the permittee is authorized to operate a "No Discharge System".

B. OTHER REQUIREMENTS

1. Authorization to Discharge

The permittee is authorized to discharge under the terms of the general permit upon receipt of written notification by the DOW and upon the issuance of a fully effective permanent program permit by DNR.

2. Best Management Practices (BMP) Plan

Pursuant to 401 KAR 5:065, Section 2(10), a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through stormwater runoff or spillage. Some of these areas will drain to present wastewater treatment plants, others will not.

3. Commingling of Wastewaters

Where wastewaters from any facility covered by this permit are combined for treatment or discharge with wastestreams from another facility, the concentration of each pollutant in the combined discharge may not exceed the most stringent limitations for that pollutant applicable to any component wastestreams of the discharge.

4. In-stream Treatment or Disposal Facilities

This permit does not authorize the construction or use of in-stream treatment or disposal facilities (sediment ponds, hollow fills, valley fills, etc.). Such authorization is within the jurisdiction of the Corps of Engineers (COE) and is implemented through the Section 404 permitting program of the Clean Water Act. Since the COE is a federal agency, this permitting action requires the issuance of a Section 401 Water Quality Certification by the DOW. This certification must be obtained on a site specific basis as the Division of Water does not recognize the COE Nationwide Permits for areas that impact more than 200 linear feet of stream or one (1) acre of wetlands. The conditions of this certification are to be incorporated into the Best Management Practices (BMP) Plan.

5. Precipitation Events in Excess of a 10-Year, 24-Hour Event

The precipitation influenced overflow or discharge of process waters from a mineral mining operation may not be subject to the Settleable solids limitation during storm conditions provided that the facilities are designed, constructed, and maintained to contain and treat the volume of wastewater which would result from a 10-year, 24-hour precipitation event.

1. If as a result of a rainfall or equivalent snowmelt greater than the 10-year, 24-hour rainfall, a discharge or overflow does not meet the limitation, the source will qualify for an exemption from the discharge limitation:

B. OTHER REQUIREMENTS - continued

5. Precipitation Events in Excess of a 10-Year, 24-Hour Event

- a. If the treatment system is designed, constructed and maintained to contain or treat the maximum volume of untreated wastewater (process and mine drainage) which would be generated by the facility during a 24-hour period without an increase in volume from precipitation plus the maximum volume of the wastewater resulting from a 10-year, 24-hour precipitation event.
 - b. If the operator takes reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow or excess discharge.
2. The operator has the burden of proof that each of the conditions of 1(a) and 1(b) have been met to qualify for an exemption from the settleable solids limitation.
 3. Controlled discharges are not eligible for this exemption.

The following table is a summary of the 10-year, 24-hour events for Kentucky.

10-YEAR 24-HOUR PRECIPITATION EVENTS							
COUNTY	INCHES	COUNTY	INCHES	COUNTY	INCHES	COUNTY	INCHES
Adair	4.6	Edmonson	4.7	Knox	4.5	Nicholas	4.2
Allen	4.8	Elliott	4.1	Larue	4.6	Ohio	4.7
Anderson	4.4	Estill	4.3	Laurel	4.5	Oldham	4.4
Ballard	5.1	Fayette	4.3	Lawrence	4.0	Owen	4.3
Barren	4.7	Fleming	4.1	Lee	4.3	Owsley	4.3
Bath	4.2	Floyd	4.2	Leslie	4.4	Pendleton	4.2
Bell	4.5	Franklin	4.4	Letcher	4.3	Perry	4.3
Boone	4.2	Fulton	5.2	Lewis	4.0	Pike	4.2
Bourbon	4.3	Gallatin	4.3	Lincoln	4.5	Powell	4.3
Boyd	4.0	Garrard	4.4	Livingston	4.9	Pulaski	4.5
Boyle	4.5	Grant	4.2	Logan	4.8	Robertson	4.2
Bracken	4.2	Graves	5.1	Lyon	4.9	Rockcastle	4.4
Breathitt	4.3	Grayson	4.7	McCracken	5.0	Rowan	4.1
Breckinridge	4.6	Green	4.6	McCreary	4.6	Russell	4.6
Bullitt	4.5	Greenup	4.0	McLean	4.8	Scott	4.3
Butler	4.8	Hancock	4.7	Madison	4.3	Shelby	4.4
Caldwell	4.9	Hardin	4.6	Magoffin	4.2	Simpson	4.8
Calloway	5.0	Harlan	4.6	Marion	4.5	Spencer	4.5
Campbell	4.2	Harrison	4.2	Marshall	5.0	Taylor	4.6
Carlisle	5.1	Hart	4.6	Martin	4.1	Todd	4.9
Carroll	4.3	Henderson	4.8	Mason	4.1	Trigg	5.0
Carter	4.0	Henry	4.4	Meade	4.6	Trimble	4.4
Casey	4.5	Hickman	5.2	Menifee	4.2	Union	4.8
Christian	4.9	Hopkins	4.8	Mercer	4.4	Warren	4.8
Clark	4.3	Jackson	4.4	Metcalfe	4.7	Washington	4.5
Clay	4.4	Jefferson	4.5	Monroe	4.7	Wayne	4.6
Clinton	4.7	Jessamine	4.4	Montgomery	4.2	Webster	4.8
Crittenden	4.9	Johnson	4.1	Morgan	4.1	Whitley	4.5
Cumberland	4.7	Kenton	4.2	Muhlenberg	4.8	Wolfe	4.2
Daviess	4.7	Knott	4.3	Nelson	4.5	Woodford	4.4

B. OTHER REQUIREMENTS - continued

6. Stormwater Management

All stormwater runoff within the boundary of the Surface Disturbance Mining Permit shall be, to the extent possible, diverted to either the pit or to sediment control structures. Stormwater that cannot be diverted shall be addressed under the Best Management Practices (BMP) Plan. During the initial phases of site preparation Best Management Practices shall be employed to control sediment until permanent sediment control structures are constructed and placed in operation.

C. SCHEDULE OF COMPLIANCE

1. The permittee shall attain compliance with the effluent limitations as delineated in PART I, A., on the effective date of this permit.
2. See Part IV for implementation and submission requirements related to the Best Management Practices (BMP) Plan.

D. MONITORING AND REPORTING

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit. Monitoring points shall not be changed without notification to and approval of the DOW. **SAMPLES ARE NOT TO BE TAKEN FROM THE SEDIMENT STRUCTURE WHEN THERE IS NO DISCHARGE.**
2. Samples taken in compliance with the monitoring requirements specified in PART I shall be taken at the following location: at nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters.
3. A total of two (2) samples shall be collected (if discharge occurs) each calendar month during a period of discharge resulting from a precipitation or pumping event. If only one (1) discharge or no discharge occurs during the calendar month, then the permittee must provide appropriate documentation.
4. Monitoring results obtained during each monitoring period must be reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you. The completed DMR for each monitoring period must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

Environmental & Public Protection Cabinet
Dept. for Environmental Protection
Division of Water/KPDES Branch
14 Reilly Road, Frankfort Office Park
ATTN: Supervisor Frankfort, Kentucky 40601

The Division of Water Regional Offices and their addresses are listed on the following page.

<u>Bowling Green Regional Office</u> #002 1508 Westen Avenue Bowling Green, KY 42104-3356 (270) 746-7475 FAX: (270)-746-7865 Attn: William Baker Allen Grayson Simpson Barren Hart Warren Butler Logan Edmonson Ohio	<u>London Regional Office</u> #007 875 South Main Street London, KY 40741-9008 (606) 878-0157 FAX: 606-877-9091 Attn: Edgar Hayden Bell Knox Owsley Clay Laurel Rockcastle Harlan Leslie Whitley Jackson McCreary
<u>Columbia Regional Office</u> #003 102 Burkesville Street Columbia, KY 42728-1408 (270) 384-4734 FAX: 270-384-5199 Attn: Sara Sproles Adair LaRue Pulaski Boyle Lincoln Russell Casey Marion Taylor Clinton Metcalfe Washington Cumberland Monroe Wayne Green Nelson	<u>Louisville Regional Office</u> #009 9116 Leesgate Road Louisville, KY 40222-5084 (502) 429-7122 FAX: 502-429-7125 Attn: Mike Mudd Breckinridge Meade Bullitt Oldham Hardin Shelby Jefferson Spencer
<u>Florence Regional Office</u> #005 8020 Veterans Memorial Drive, Suite 110 Florence, KY 41042 (859) 525-4923 FAX: 859-525-4157 Attn: Todd Giles Boone Gallatin Owen Bracken Grant Pendleton Campbell Henry Trimble Carroll Kenton	<u>Madisonville Regional Office</u> #011 State Office Building, 4th Floor 625 Hospital Drive Madisonville, KY 42431-1683 (270) 824-7529 FAX: 270-824-7070 Attn: Ed Carroll Caldwell Hancock Muhlenberg Christian Henderson Todd Crittenden Hopkins Union Daviess McLean Webster
<u>Frankfort Regional Office</u> 643 Teton Trail, Suite B Frankfort, KY 40601-1758 (502) 564-3358 FAX: 502-564-5043 Attn: Massoud Shoa Anderson Franklin Mercer Scott Bourbon Garrard Montgomery Woodford Clark Harrison Nicholas Estill Jessamine Powell Fayette Madison Robertson	<u>Morehead Regional Office</u> #013 344 Christy Creek Road Morehead, KY 40351 (606)-784-6635 FAX: 606-784-4544 Attn: Danny Fraley Bath Fleming Mason Boyd Greenup Menifee Carter Lawrence Morgan Elliot Lewis Rowan
<u>Hazard Regional Office</u> #006 233 Birch Street Hazard, KY 41701-2179 (606)-435-6022 FAX: 606-435-6025 Attn: Roger Martin Breathitt Knott Magoffin Pike Floyd Lee Martin Wolfe Johnson Letcher Perry	<u>Paducah Regional Office</u> #015 130 Eagle Nest Drive Paducah, KY 42003-9435 (270)-898-8468 FAX: 270-898-8640 Attn: Gaye Brewer Ballard Fulton Livingston McCracken Calloway Graves Lyon Trigg Carlisle Hickman Marshall

E. DEFINITIONS

1. Calendar day: Means any 24-hour period.
2. Clay: Means a natural substance or soft rock which, when finely ground and mixed with water, forms a pasty, moldable mass that preserves its shape when air dried; the particles soften and coalesce upon being highly heated and form a stony mass upon cooling.
3. Controlled discharge: Means any discharge that is pumped or siphoned.
4. Daily maximum concentration: Means the daily determination of concentration as an instantaneous maximum that cannot be exceeded by any sample.
5. Dolomite: Means a sedimentary rock composed primarily of the crystalline carbonate mineral dolomite $\text{CaMg}(\text{CO}_3)_2$. Many limestones contain small amounts of Dolomite; however, the term Dolomite is reserved for rocks which contain 15% or more Magnesium Carbonate.
6. Expanded Operation: Means any amendment or revision of the mining plan to facilitate the extraction of additional mineral or to discharge into a drainage area not previously affected by the mining activity.
7. Fluorspar: Means an ore of the mineral Fluorite (CaF_2). This occurs in veins and as bedding replacements found in Western Kentucky, as part of a mining district referred to as the Cave-In-Rock District and in Central Kentucky, as the Central Kentucky Vein and Fault System. Its origin is the result of hydrothermal activity.
8. Grab sample: Means a single influent or effluent portion collected in less than 15 minutes at the period most representative of the total discharge.
9. Gravel: Means a sedimentary rock type that implies a loosely, compacted, coarse sediment that is generally larger than 4 mm, but smaller than boulders; a naturally occurring aggregate.
10. Limestone: Means a crystalline sedimentary rock that is primarily composed of the mineral CaCO_3 . However, it may be considered as any sedimentary rock composed essentially of carbonates, chiefly Calcite or Dolomite, but may contain small amounts of iron-carbonates (Siderite).
11. Instantaneous maximum: Means the maximum value not to be exceeded at any time.
12. Monthly average concentration: Means the arithmetic average of all sample concentrations made during a calendar month.
13. Normal working hours: Means the daylight working hours Monday thru Friday excluding nationally, state, or religious observed holidays.
14. Non-discharging or recycle operation: Means a non-coal (mineral) mining operation that due to its physical makeup does not have a point discharge. In such operations all waters including stormwater runoff are directed to an operating pit that does not overflow.
15. Point Source: Means any discernable, confined, and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft, from which pollutants are or may be discharged.

E. DEFINITIONS - continued

16. Pollutant: Means dredged spoil, solid waste, incinerator residue, sewage, sewage sludge, garbage, chemical, biological, or radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, industrial, municipal or agricultural waste, any substance resulting from the development, processing or recovery of any natural resource, filter backwash water, munitions, and cellar dirt.
17. Precipitation influenced discharges: Means a discharge that occurs as a result of a precipitation (rainfall or snowmelt) event.
18. Riparian Zone: Means the area of land on either side of streams, channels, rivers, and other water bodies. These areas are normally distinctly different from the surrounding lands because of unique soil and vegetation characteristics (e.g., wetter soil than adjacent soil conditions where aquatic vegetative communities thrive). For the purpose of this permit the riparian zone will be assumed to be 100 feet from the bank of the water body unless demonstrated by the permittee to be smaller.
19. Sand: Means a sedimentary rock type that implies a loosely, compacted, coarse sediment that is generally composed of particles that range in size from 1/16 mm to 2 mm. Most sands are predominantly composed of quartz grains or fragments of siliceous rocks.
20. Settleable solids: Means that matter measured by the volumetric method specified in Part I, F.2.
21. Treatment Facility/Treatment System: Means all structures which contain, convey, and as necessary, chemically or physically treat mine waters for pollutant removal. This includes all pipes, channels, ponds, basins, tanks, and all other equipment serving such structures.
22. 10-year, 24-hour precipitation events: The maximum 24-hour precipitation event with a probable recurrence interval of once in 10 years, as defined by the Kentucky Division of Water Engineering Memorandum No. 2, "Rainfall Frequency Values for Kentucky" (4-30-71) revised (6-1-79).

F. TEST PROCEDURES

1. Test procedures for the analysis of pollutants shall conform to all regulations published pursuant to KRS 224 (401 KAR 5:065, Section 1(10)).
2. Settleable Solids
 - a. Test procedures for the determination of settleable solids, as described in c., shall conform to 40 CFR 434.64 as adopted by 401 KAR 5:065, Section 4(2).
 - b. Fill an Imhoff cone to the one (1) liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cone as milliliters per liter. Where a separation of settleable and floating materials occurs do not include the floating material.

G. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

1. The exact place, date, and time of sampling;
2. The person(s) who obtained the samples or measurements;
3. The date(s) the analyses were performed;
4. The person(s) who performed the analyses;
5. The analytical technique(s) or method(s) used and;
6. The results of all required analyses.

H. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DOW DMR-01). Such increased frequency shall also be indicated.

I. RECORDS RETENTION

The permittee shall maintain records of all monitoring including: sampling dates and times, sampling methods used, persons obtaining samples or measurements, analyses dates and times, persons performing analyses, and results of analyses and measurements. Records shall be maintained for three (3) years or longer if there is unresolved litigation or if requested by the Division of Water.

J. REOPENER CLAUSE

1. This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Kentucky Revised Statutes Chapter 224, if the effluent standard or limitation so issued or approved:
 - (a) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (b) controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 then applicable.

2. This permit may be modified when the cumulative effects on the environment are unacceptable, pursuant to 401 KAR 5:070, Section 6(1)(b).

STANDARD CONDITIONS FOR KPDES PERMIT

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

The following KPDES permit conditions apply to all discharges authorized by this permit pursuant to 401 KAR 5:065, Section 1.

(1) Duty to comply.

(a) General requirement.

The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of KRS Chapter 224, among which shall be the following remedies: enforcement action, permit revocation, revocation and reissuance, or modification; or denial of a permit renewal application.

(b) Specific duties.

1. The permittee shall comply with effluent standards or prohibitions established under 40 CFR Part 129 as of July 1, 2001, as adopted without change, within the time provided in the federal regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
2. Any person who violates a permit condition as set forth in the KPDES administrative regulations shall be subject to penalties under KRS 224.99-010(1) and (4).

(2) Duty to reapply.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit as required in 401 KAR 5:060, Section 1.

(3) Need to halt or reduce activity not a defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) Duty to mitigate.

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) Proper operation and maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also shall include adequate laboratory controls, and appropriate quality assurance procedures. This provision shall require the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only if the operation is necessary to achieve compliance with the conditions of the permit.

(6) Permit actions.

The permit may be modified, revoked and reissued, or revoked for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or a notification of planned changes or anticipated noncompliance, shall not stay any permit condition.

(7) Property rights.

This permit shall not convey any property rights of any kind, or any exclusive privilege.

(8) Duty to provide information.

The permittee shall furnish to the cabinet, within a reasonable time, any information which the cabinet may request to determine whether cause exists for modifying, revoking and reissuing, or revoking this permit, or to determine compliance with this permit. The permittee shall also furnish to the cabinet, upon request, copies of records required to be kept by this permit.

(9) Inspection and entry.

The permittee shall allow the cabinet, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records pertinent to the KPDES program are or may be kept;
- (b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring KPDES program compliance or as otherwise authorized by KRS Chapter 224, any substances or parameters at any location.

(10) Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the cabinet at any time.
- (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The individuals who performed the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The individuals who performed the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of the analyses.
- (d) Monitoring shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit.
- (e) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be subject to penalties under KRS 224.99-010(4).

(11) Signatory requirement.

All applications, reports, or information submitted to the cabinet shall be signed and certified as indicated in 401 KAR 5:060, Section 9. Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties under KRS 224.99-010(4).

(12) Reporting requirements.

(a) Planned changes.

The permittee shall give notice to the cabinet as soon as possible of any planned physical alteration or additions to the permitted facility. Notice shall be required only if:

1. The alteration or addition to a permitted facility may meet one (1) of the criteria for determining whether a facility is a new source in 401 KAR 5:080, Section 5; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification only applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 401 KAR 5:080, Section 5.

(b) Anticipated noncompliance.

The permittee shall give advance notice to the cabinet of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers.

The permit shall not be transferable to any person except after notice to the cabinet. The cabinet may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate other requirements as may be necessary under KRS Chapter 224.

(d) Monitoring reports.

Monitoring results shall be reported at the intervals specified in the permit. Monitoring results shall be reported as follows:

1. Monitoring results shall be reported on a Discharge Monitoring Report (DMR).
2. If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the cabinet in the permit.

(e) Compliance schedules.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

(f) Twenty-four (24) hour reporting.

The permittee shall follow the provisions of 401 KAR 5:015 and shall orally report any noncompliance which may endanger health or the environment, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. This report shall be in addition to and not in lieu of any other reporting requirement applicable to the noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The cabinet may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours. The following shall be included as events which shall be reported within twenty-four (24) hours:

1. Any unanticipated bypass which exceeds any effluent limitation in the permit, as indicated in subsection (13) of this section.
2. Any upset which exceeds any effluent limitation in the permit.
3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the cabinet in the permit to be reported within twenty-four (24) hours, as indicated in Section 2(7) of this administrative regulation.

(g) Other noncompliance.

The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this subsection, when monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this subsection.

(h) Other information.

Where the permittee becomes aware that it failed to submit any relevant fact in a permit application, or submitted incorrect information in a permit application or in any report to the cabinet, it shall promptly submit these facts or information.

(13) Occurrence of a bypass.

(a) Bypass not exceeding limitations.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. This type of bypass shall not be subject to the provisions of paragraphs (b) and (c) of this subsection.

(b) Notice.

1. Anticipated bypass.

If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass. Compliance with this requirement constitutes compliance with 401 KAR 5:015, Section 1.

2. Unanticipated bypass.

The permittee shall submit notice of an unanticipated bypass as required in subsection (12)(f) of this section, twenty-four (24) hour notice. Compliance with this requirement constitutes compliance with 401 KAR 5:015, Section 4.

(c) Prohibition of a bypass.

1. Bypassing shall be prohibited, and the cabinet may take enforcement action against a permittee for bypass, unless:

a. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition shall not be satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph (b) of this subsection.

2. The cabinet may approve an anticipated bypass, after considering its adverse effects, if the cabinet determines that it will meet the three (3) conditions listed in subparagraph 1a, b, and c of this paragraph.

(14) Occurrence of an upset.

(a) Effect of an upset.

An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of paragraph (b) of this subsection are met.

(b) Conditions necessary for a demonstration of an upset.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the permittee can identify the causes of the upset;

2. The permitted facility was at the time being properly operated;

3. The permittee submitted notice of the upset as required in subsection (12)(f) of this section; and

4. The permittee complied with any remedial measures required under subsection (4) of this section.

(c) Burden of proof.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset shall have the burden of proof.

(15) Additional conditions applicable to specified categories of KPDES permits.

The following conditions, in addition to others set forth in this administrative regulation, shall apply to all KPDES permits within the categories specified below:

(a) Existing manufacturing, commercial, mining, and silvicultural dischargers.

In addition to the reporting requirements under subsections (12), (13), and (14) of this section, any existing manufacturing, commercial, mining, and silvicultural discharger shall notify the cabinet as soon as it knows or has reason to know:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- a. 100 micrograms per liter (100 µg/l);
- b. 200 micrograms per liter (200 µg/l) for acrolein and acrylonitrile; 500 micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one (1) milligram per liter (1 mg/l) for antimony;
- c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 401 KAR 5:060, Section 2(7);
- d. The level established by the cabinet in accordance with Section 2(6) of this administrative regulation.

2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- a. 500 micrograms per liter (500 µg/l);
- b. One (1) milligram per liter (1 mg/l) for antimony;
- c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 401 KAR 5:060, Section 2(7); or
- d. The level established by the cabinet in accordance with Section 2(6) of this administrative regulation.

(b) POTWs.

1. POTWs shall provide adequate notice to the cabinet of the following:

- a. Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to the KPDES administrative regulations if it were directly discharging those pollutants; or
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

2. For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTWs and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PART III

ADDITIONAL REQUIREMENTS

1. Application, Modification, Termination, and Transfer Requirements

Application for a new coverage under this general permit shall take the form of a Notice of Intent (NOI), which will consist of the following elements:

- a. A completed KPDES FORM NOI-MM and attachments.
- b. A full size color USGS 7½-minute quadrangle map with the facility site clearly marked.
- c. Copies of the Mining and Reclamation Map and Environmental Resources Map.
- d. Each receiving stream shall be characterized by data collection at a minimum of three sites, one at the proposed discharge location, one upstream and one downstream. If there is more than one discharge location within the watershed, then the locations shall be one downstream of all proposed discharge locations, one upstream of all proposed discharge locations, and one approximately half the distance between the upstream and downstream locations. At each location, a Stream Characteristics Data Sheet shall be completed. Photographs of the receiving stream at each location shall be provided. At least three photographs per site shall be provide, one of the site, one looking downstream, and one looking upstream.

The Notice of Intent (NOI) is to be submitted to the Division of Water at the same time as the application for a Surface Disturbance Permit is filed with the Department for Natural Resources. Should changes in the proposed activity occur then a revised NOI will be required.

The afore-described procedure shall also apply to those operations that meet the definition of an expanded operation, see definition 6 on page I-9 of this permit.

Termination of general permit coverage shall take the form of a Notice of Termination (NOT), which will consist of the following elements:

- a. A completed KPDES FORM NOT-MM.
- b. Copies of DNR release.

NOTs are to be filed only after the entire permitted area has received final bond release.

Transfers of general permit coverage shall consist of the following elements:

- a. A completed Change in Ownership Certification.
- b. A copy of the DNR permit.

Transfers shall be filed only after the issuance of the DNR permit.

The KPDES FORM NOI-MM, NOT-MM, and Change in Ownership Certification forms are available from the Division of Water's web site at:

http://www.water.ky.gov/homepage_repository/kpdes_permit_aps.htm

PART III

ADDITIONAL REQUIREMENTS - continued

2. Operations Automatically Excluded From General Permit Coverage

- a. Those non-coal (mineral) mining operations which have not been permitted under KRS Chapter 350 and KAR Title 405 Chapter 5.
- b. New or expanded operations proposing to discharge directly into a water body that has been classified as a Coldwater Aquatic Habitat (CAH) or as an Outstanding State Resource Water (OSRW) as listed in 401 KAR 5:026, Section 5.
- c. New or expanded operations proposing to discharge directly into or to a direct first or second order tributary of a Publicly-owned Lakes or Reservoirs as listed in 401 KAR 5:026, Section 5.
- d. New or expanded operations proposing to discharge directly into a receiving stream that has been classified as an Outstanding National Resource Water or as an Exceptional Waters as listed in 401 KAR 5:030, Section 3.
- e. New or expanded operations proposing to mine through an intermittent or perennial stream or within the riparian zone of such a stream.
- f. New or expanded operations within five (5) miles upstream of an existing drinking water intake.
- g. Any operation discharging to a water of the Commonwealth that has been listed, in the most recently developed 305 (b) report or 303(d) list, as impaired for one or more of the pollutants commonly associated with non-coal (mineral) mining.
- h. Any operation proposing to dispose of solid or special wastes within the mining area.
- i. Any operation, which the Division of Water (DOW) determines that an individual permit would better address the discharges from that operation.

3. Operations Which May Be Excluded From General Permit Coverage

- a. The discharge(s) is a significant contributor of pollution as determined by the factors set forth at 401 KAR 5:060, Section 8(3)(b);
- b. The discharger is not in compliance with the conditions of this permit;
- c. A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
- d. New or revised effluent limitation guidelines are promulgated for point sources covered by this permit;
- e. A Water Quality Management Plan containing requirements applicable to such point sources is approved;

PART III

ADDITIONAL REQUIREMENTS - continued

3. **Operations Which May Be Excluded From General Permit Coverage - continued**
- f. The point source(s) covered by this permit no longer meet the requirements of 401 KAR 5:055, Section 5(1);
 - g. Kentucky water quality standards for any waters of the Commonwealth are revised and a request is made in accordance with 401 KAR 5:070, Section 6(1)(c);
 - h. The discharge(s) is to a tributary of Coldwater Aquatic Habitat or as an Outstanding State Resource Water as listed in 401 KAR 5:026, Section 5 or as an Outstanding National Resource Water or as an Exceptional Waters as listed in 401 KAR 5:030, Section 3.

Any interested person may petition the Division of Water to require an individual permit under these conditions.

The Division of Water may require any permittee authorized by this permit to apply for an individual KPDES permit only if the permittee has been notified in writing that a permit application is required.

PART IV

BEST MANAGEMENT PRACTICES

SECTION A. GENERAL CONDITIONS

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.01-010(35) and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

2. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. A Best Management Practices (BMP) plan will be prepared by the permittee unless the permittee can demonstrate through the submission of a BMP outline that the elements and intent of the BMP have been fulfilled through the use of existing plans such as the Spill Prevention Control and Countermeasure (SPCC) plans, contingency plans, and other applicable documents.

3. Implementation

If this is the first time for the BMP requirement, then the plan shall be developed within 90 days of the effective date of the permit. Implementation shall be within 180 days of that submission. For permit renewals the plan in effect at the time of permit reissuance shall remain in effect. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be submitted to the Division of Water and implemented as soon as possible.

4. General Requirements

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- b. Establish specific objectives for the control of toxic and hazardous pollutants.
 - (1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

- (2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants," the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.
- c. Establish specific Best Management Practices to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
- d. Include any special conditions established in part b of this section.
- e. Be reviewed by plant engineering staff and the plant manager.

5. **Specific Requirements**

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document," and shall include the following baseline BMPs as a minimum.

- a. BMP Committee
- b. Reporting of BMP Incidents
- c. Risk Identification and Assessment
- d. Employee Training
- e. Inspections and Records
- f. Preventive Maintenance
- g. Good Housekeeping
- h. Materials Compatibility
- i. Security
- j. Materials Inventory

6. **SPCC Plans**

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

7. **Hazardous Waste Management**

The permittee shall assure the proper management of solid and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

8. **Documentation**

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available upon request to NREPC personnel. Initial copies and modifications thereof shall be sent to the following addresses when required by Section 3:

Kentucky Natural Resources and
Environmental Protection Cabinet
Dept. for Environmental Protection
Division of Water/KPDES Branch
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601

9. **BMP Plan Modification**

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. **Modification for Ineffectiveness**

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants," then the specific objectives and requirements under paragraphs b and c of Section 4, the permit, and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

SECTION B. SPECIFIC CONDITIONS

The following items may be incorporated into the BMP plan:

1. Management of the stormwater runoff within the DNR Surface Disturbance Mining Permit boundary that is not directed to the pit or a sediment structure.
2. The Groundwater Protection Plan as required by 401 KAR 5:037
3. The conditions of any 401 Water Quality Certification granted to the operation.



ERNIE FLETCHER
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
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TERESA J. HILL
SECRETARY

FACT SHEET

**KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE TREATED WASTEWATER
INTO WATERS OF THE COMMONWEALTH**

KPDES No.: KYG840000 Permit Writer: Larry Sowder Date: June 22, 2007
AI No.: 35050

1. **SYNOPSIS OF APPLICATION**

a. Name and Address of Applicant

Those non-coal (mineral) mining operations, which have obtained or are in the process of obtaining a Surface Disturbance Mining Permit from the Department for Natural Resources (DNR), pursuant to Chapter 350 of the Kentucky Revised Statutes (KRS) and Chapter 5 of Title 405 of the Kentucky Administrative Regulations (KARs). Those Devonian (oil) shale mining operations which are regulated under Chapter 30 of Title 405 are not eligible for coverage.

b. Facility Location

Those non-coal (mineral) mining operations located within the 120 counties of the Commonwealth of Kentucky.

c. Description of Applicant's Operation

Covered activities include all forms of non-coal (mineral) mining and processing with the following exceptions:

- 1) Those non-coal (mineral) mining operations which have not been permitted under KRS Chapter 350 and KAR Title 405 Chapter 5.
- 2) New or expanded operations proposing to discharge directly into a water body that has been classified as a Cold Water Aquatic Habitat (CAH) or as an Outstanding State Resource Water (OSRW) as listed in 401 KAR 5:026, Section 5.
- 3) New or expanded operations proposing to discharge directly into or to a direct first or second order tributary of a publicly-owned lake or reservoir as listed in 401 KAR 5:026, Section 5.

c. Description of Applicant's Operation - continued

Covered activities include all forms of non-coal (mineral) mining and processing with the following exceptions:

- 4) New or expanded operations proposing to discharge directly into a water body that has been categorized as an Outstanding National Resource Water (ONRW) or as an Exceptional Water (EW) as listed in 401 KAR 5:030.
- 5) New or expanded operations proposing to mine through an intermittent or perennial stream or within the riparian zone of such a stream.
- 6) New or expanded operations within five (5) miles upstream of an existing drinking water intake.
- 7) Any operation discharging to a water of the Commonwealth that has been listed, in the most recently developed 305 (b) report or 303(d) list, as impaired for one or more of the pollutants commonly associated with non-coal (mineral) mining.
- 8) **Any operation proposing to dispose of solid or special wastes within the mining area.**
- 9) Any operation, which the Division of Water (DOW) determines that an individual permit would better address the discharges from that operation.

d. Production Capacity of Facility

Not Applicable

e. Description of Existing Pollution Abatement Facilities

Treatment provided ranges from none to neutralization and sedimentation, depending upon the quality of the discharge.

f. Permitting Action

Reissuance of a general permit for non-coal (mineral) mining and associated activities conducted in the Commonwealth of Kentucky.

2. **RECEIVING WATERS**

a. Receiving Water Name

Those water bodies of the Commonwealth that comprise the Mississippi and Ohio River basins and sub-basins within the political and geographic boundaries of Kentucky.

b. Stream Segment Use Classifications

Warm Water Aquatic Habitat, Primary and Secondary Contact Recreation, and Domestic Water Supply

c. Stream Segment Antidegradation Categorization

Included are those water bodies which have been categorized as High Quality Waters, pursuant to 401 KAR 5:030, Section 3.

Included are those water bodies which have been categorized as Impaired Waters, pursuant to 401 KAR 5:030, Section 4, and which have been listed in the most recently developed 305 (b) report or 303(d) list, as impaired for pollutants not commonly associated with non-coal (mineral) mining.

d. Stream Low Flow Condition

The 7-day, 10-year low flow conditions of the receiving streams can range from zero (0) cubic feet per second (cfs) to 111,000 cfs for the Mississippi River.

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Controlled mine dewatering of limestone and dolomite operations

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	Variable	Variable	Report	Report	401 KAR 5:065, Section 2(c)8
Total Suspended Solids (mg/l) (Quarry Water Only)	Variable	Variable	15	30	401 KAR 5:080, Section 1(2)(c)2
Total Suspended Solids (mg/l) (Quarry and Wash Waters)	Variable	Variable	20	40	401 KAR 5:080, Section 1(2)(c)2
Oil & Grease (mg/l)	Variable	Variable	10	15	401 KAR 5:080, Section 1(2)(c)2
pH (Standard Units)	Variable	Variable	6.0 (min)	9.0 (max)	401 KAR 5:031, Section 4

4. **METHODOLOGY USED IN DETERMINING LIMITATIONS**

a. Serial Number

Controlled mine dewatering of limestone and dolomite operations

b. Effluent Characteristics

Flow	Total Suspended Solids	Oil & Grease	pH
------	------------------------	--------------	----

c. Pertinent Factors

Stormwater runoff or process waters from permittee or associated corporate entity owned or operated processing plants such as asphalt, bagging, concrete, etc. within the DNR permitted area are included and do not need separate permits.

d. Monitoring Requirements

Instantaneous flow measurements shall be collected twice per month.

Oil & Grease shall be monitored once per month by grab sample.

Total Suspended Solids and pH shall be monitored twice per month by grab sample.

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow

The monitoring requirement for this parameter is consistent with the requirements of 401 KAR 5:065, Section 2(8).

Oil & Grease

The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "Best Professional Judgment" (BPJ) determination of the "Best Practicable Control Technology Currently Available" (BPT) and "Best Available Technology Economically Achievable" (BAT) requirements for these types of discharges.

Total Suspended Solids

The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "BPJ" determination of the "BPT" and "BAT" requirements for these types of discharges. The Division of Water based its determination on information provide by the Industrial Technology Division of the Environmental Protection Agency (EPA Headquarters) and the document entitled "Water Handling Systems of Crushed Stone Operations", National Crushed Stone Association, May 1984.

pH

The limits for this parameter are consistent with the requirements of 401 KAR 5:031.

5. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Controlled mine dewatering of clay, sand, gravel, fluorspar, and/or other vein mineral operations.

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	Variable	Variable	Report	Report	401 KAR 5:065, Section 2(8)
Total Suspended Solids (mg/l)	Variable	Variable	40	80	401 KAR 5:080, Section 1(2)(c)2
Oil & Grease (mg/l)	Variable	Variable	10	15	401 KAR 5:080, Section 1(2)(c)2
pH (Standard Units)	Variable	Variable	6.0 (min)	9.0 (max)	401 KAR 5:031, Section 4

6. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Controlled mine dewatering of clay, sand, gravel, fluorspar, and/or other vein mineral operations.

b. Effluent Characteristics

Flow	Total Suspended Solids	Oil & Grease	pH
------	------------------------	--------------	----

c. Pertinent Factors

Stormwater runoff or process waters from permittee or associated corporate entity owned or operated processing plants such as asphalt, bagging, concrete, etc. within the DNR permitted area are included and do not need separate permits.

d. Monitoring Requirements

Instantaneous flow measurements shall be collected twice per month.

Oil & Grease shall be monitored once per month by grab sample.

Total Suspended Solids and pH shall be monitored twice per month by grab sample.

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow

The monitoring requirement for this parameter is consistent with the requirements of 401 KAR 5:065, Section 2(8).

Oil & Grease

The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "BPJ" determination of the "BPT" and "BAT" requirements for these types of discharges.

Total Suspended Solids

The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "BPJ" determination of the "BPT" and "BAT" requirements for these types of discharges. The Division of Water based its determination on the model permit for construction sand and gravel developed by the EPA Office of Water Enforcement and Permits. The mining methods and wastewater treatment for clay, fluorspar, and other vein minerals are sufficiently similar to those for sand and gravel mining that application of this requirement is appropriate.

pH

The limits for this parameter are consistent with the requirements of 401 KAR 5:031.

7. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Precipitation influenced discharges from limestone, dolomite, clay, sand, gravel, fluorspar, and/or other vein minerals.

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	Variable	Variable	Report	Report	401 KAR 5:065, Section 2(8)
Precipitation (inches)	Variable	Variable	Report	Report	401 KAR 5:065, Section 2(8)
Settleable Solids (ml/l)	Variable	Variable	Report	0.5	401 KAR 5:080, Section 1(2)(c)2
Oil & Grease (mg/l)	Variable	Variable	10	15	401 KAR 5:080, Section 1(2)(c)2
pH (Standard Units)	Variable	Variable	6.0 (min)	9.0 (max)	401 KAR 5:031, Section 4

8. **METHODOLOGY USED IN DETERMINING LIMITATIONS**

a. Serial Number

Precipitation influenced discharges from limestone, dolomite, clay, sand, gravel, fluorspar, and/or other vein minerals.

b. Effluent Characteristics

Flow	Settleable Solids	Precipitation	Oil & Grease	pH
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c. Pertinent Factors

Stormwater runoff or process waters from permittee or associated corporate entity owned or operated processing plants such as asphalt, bagging, concrete, etc. within the DNR permitted area are included and do not need separate permits.

d. Monitoring Requirements

Instantaneous flow measurements shall be collected twice per month.

Oil & Grease shall be monitored once per month by grab sample.

Total Suspended Solids, Precipitation, and pH shall be monitored twice per month by grab sample.

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow and Precipitation

The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8)(a).

Oil & Grease

The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "BPJ" determination of the "BPT" and "BAT" requirements for these types of discharges.

Settleable Solids

The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "BPJ" determination of the "BPT" and "BAT" requirements for these types of discharges. The Division of Water based its determination on 40 CFR Part 434 Coal Mining Effluent Guidelines. The mining methods and wastewater treatment for clay, fluorspar, and other vein minerals are sufficiently similar to those for coal mining that application of this requirement is appropriate.

pH

The limits for this parameter are consistent with the requirements of 401 KAR 5:031.

9. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - No discharge or recycling non-coal mineral mining operation.

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly	Daily	Monthly	Daily	
	Average	Maximum	Average	Maximum	

For those non-coal mineral mining operations that direct all waters including stormwater runoff, dredge return water, etc., to the pit, the permittee is authorized to operate a "No Discharge System".

10. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

No discharge or recycling non-coal mineral mining operation.

b. Effluent Characteristics

None

c. Pertinent Factors

Stormwater runoff or process waters from permittee or associated corporate entity owned or operated processing plants such as asphalt, bagging, concrete, etc. within the DNR permitted area are included and do not need separate permits.

d. Monitoring Requirements

None

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Authorization to operate a "No Discharge System"

This authorization is consistent with the requirements of 401 KAR 5:005, Section 2.

11. ANTIDEGRADATION

The conditions of 401 KAR 5:029, Section 1 have been satisfied by this permit action. The permit does not contain any water quality based effluent limitations. Therefore, a review under 401 KAR 5:030 Section 1 is not applicable.

12. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

Permittee shall comply with the effluent limitations by the effective date of the permit.

13. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

Authorization to Discharge

The permittee is authorized to discharge under the terms of this general permit upon receipt of written notification by the Division of Water.

Best Management Practices (BMP) Plan

Pursuant to 401 KAR 5:065, Section 2(10), a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through stormwater runoff or spillage. Some of these areas will drain to present wastewater treatment plants, others will not.

13. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE - continued

Commingling of Wastestreams

Where wastestreams from any facility covered by this permit are combined for treatment or discharge with wastestreams from another facility, the concentration of each pollutant in the combined discharge may not exceed the most stringent limitations for that pollutant applicable to any component wastestream of the discharge.

In-stream Treatment or Disposal Facilities

This permit does not authorize the construction or use of in-stream treatment or disposal facilities (sediment ponds, hollow fills, valley fills, etc.). Such authorization is within the jurisdiction of the Corps of Engineers (COE) and is implemented through the Section 404 permitting program of the Clean Water Act. Since the COE is a federal agency, this permitting action requires the issuance of a Section 401 Water Quality Certification by the DOW. This certification must be obtained on a site specific basis as the Division of Water does not recognize the COE Nationwide Permits for areas that impact more than 200 linear feet of stream or one (1) acre of wetlands. The conditions of this certification are to be incorporated into the Best Management Practices (BMP) Plan.

Precipitation Events in Excess of a 10-Year, 24-Hour Event

The precipitation influenced overflow or discharge of process waters from a non-coal mineral mining operation may not be subject to the Settleable solids limitation during storm conditions provided that the facilities are designed, constructed, and maintained to contain and treat the volume of wastewater which would result from a 10-year, 24-hour precipitation event.

1. If, as a result of a rainfall or equivalent snowmelt greater than the 10-year, 24-hour rainfall, a discharge or over flow does not meet the limitation, the source will qualify for an exemption from the discharge limitation:
 - a. If the treatment system is designed, constructed and maintained to contain or treat the maximum volume of untreated wastewater (process and mine drainage) which would be generated by the facility during a 24-hour period without an increase in volume from precipitation plus the maximum volume of the wastewater resulting from a 10-year, 24-hour precipitation event.
 - b. If the operator takes reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow or excess discharge.
2. The operator has the burden of proof that each of the conditions of 1a and 1b above have been met to qualify for an exemption from the Settleable solids limitation.
3. Controlled discharges are not eligible for this exemption.

The following table is a summary of the 10-year, 24-hour events for Kentucky.

13. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE - continued

10-YEAR 24-HOUR PRECIPITATION EVENTS							
COUNTY	INCHES	COUNTY	INCHES	COUNTY	INCHES	COUNTY	INCHES
Adair	4.6	Edmonson	4.7	Knox	4.5	Nicholas	4.2
Allen	4.8	Elliott	4.1	Larue	4.6	Ohio	4.7
Anderson	4.4	Estill	4.3	Laurel	4.5	Oldham	4.4
Ballard	5.1	Fayette	4.3	Lawrence	4.0	Owen	4.3
Barren	4.7	Fleming	4.1	Lee	4.3	Owsley	4.3
Bath	4.2	Floyd	4.2	Leslie	4.4	Pendleton	4.2
Bell	4.5	Franklin	4.4	Letcher	4.3	Perry	4.3
Boone	4.2	Fulton	5.2	Lewis	4.0	Pike	4.2
Bourbon	4.3	Gallatin	4.3	Lincoln	4.5	Powell	4.3
Boyd	4.0	Garrard	4.4	Livingston	4.9	Pulaski	4.5
Boyle	4.5	Grant	4.2	Logan	4.8	Robertson	4.2
Bracken	4.2	Graves	5.1	Lyon	4.9	Rockcastle	4.4
Breathitt	4.3	Grayson	4.7	McCracken	5.0	Rowan	4.1
Breckinridge	4.6	Green	4.6	McCreary	4.6	Russell	4.6
Bullitt	4.5	Greenup	4.0	McLean	4.8	Scott	4.3
Butler	4.8	Hancock	4.7	Madison	4.3	Shelby	4.4
Caldwell	4.9	Hardin	4.6	Magoffin	4.2	Simpson	4.8
Calloway	5.0	Harlan	4.6	Marion	4.5	Spencer	4.5
Campbell	4.2	Harrison	4.2	Marshall	5.0	Taylor	4.6
Carlisle	5.1	Hart	4.6	Martin	4.1	Todd	4.9
Carroll	4.3	Henderson	4.8	Mason	4.1	Trigg	5.0
Carter	4.0	Henry	4.4	Meade	4.6	Trimble	4.4
Casey	4.5	Hickman	5.2	Menifee	4.2	Union	4.8
Christian	4.9	Hopkins	4.8	Mercer	4.4	Warren	4.8
Clark	4.3	Jackson	4.4	Metcalfe	4.7	Washington	4.5
Clay	4.4	Jefferson	4.5	Monroe	4.7	Wayne	4.6
Clinton	4.7	Jessamine	4.4	Montgomery	4.2	Webster	4.8
Crittenden	4.9	Johnson	4.1	Morgan	4.1	Whitley	4.5
Cumberland	4.7	Kenton	4.2	Muhlenberg	4.8	Wolfe	4.2
Daviess	4.7	Knott	4.3	Nelson	4.5	Woodford	4.4

Stormwater Management

All stormwater runoff within the boundary of the Surface Disturbance Mining Permit shall be to the extent possible diverted to either the pit or to sediment control structures. Stormwater that cannot be diverted shall be addressed under the BMP Plan. During the initial phase of site preparation Best Management Practices shall be employed to control sediment until permanent sediment control structures are constructed and placed in operation.

14. PERMIT DURATION

Five (5) years.

15. PERMIT INFORMATION

The application, draft permit fact sheet, public notice, comments received, and additional information is available by writing the Division of Water at 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601.

16. **REFERENCES AND CITED DOCUMENTS**

All material and documents referenced or cited in this fact sheet are a part of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

17. **CONTACT**

For further information contact the individual identified on the Public Notice or the Permit Writer - Larry Sowder at (502) 564-3410, extension 472 or e-mail Larry.Sowder@ky.gov.

18. **PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final permit decision, deadline for comments, and other information required by 401 KAR 5:075, Section 4(2)(e).

DEFINITIONS OF TERMS USED IN THE NON-COAL MINERAL MINING GENERAL PERMIT

1. Calendar day: Means any 24-hour period.
2. Clay: Means a natural substance or soft rock which, when finely ground and mixed with water, forms a pasty, moldable mass that preserves its shape when air dried; the particles soften and coalesce upon being highly heated and form a stony mass upon cooling.
3. Controlled discharge: Means any discharge that is pumped or siphoned.
4. Daily maximum concentration: Means the daily determination of concentration as an instantaneous maximum that cannot be exceeded by any sample.
5. Dolomite: Means a sedimentary rock composed primarily of the crystalline carbonate mineral dolomite $\text{CaMg}(\text{CO}_3)_2$. Many limestones contain small amounts of Dolomite; however, the term Dolomite is reserved for rocks which contain 15% or more Magnesium Carbonate.
6. Expanded Operation: Means any amendment or revision of the mining plan to facilitate the extraction of additional mineral or to discharge into a drainage area not previously affected by the mining activity.
7. Fluorspar: Means an ore of the mineral Fluorite (CaF_2). This occurs in veins and as bedding replacements found in Western Kentucky, as part of a mining district referred to as the Cave-In-Rock District and in Central Kentucky, as the Central Kentucky Vein and Fault System. Its origin is the result of hydrothermal activity.
8. Grab sample: Means a single influent or effluent portion collected in less than 15 minutes at the period most representative of the total discharge.
9. Gravel: Means a sedimentary rock type that implies a loosely, compacted, coarse sediment that is generally larger than 4 mm, but smaller than boulders; a naturally occurring aggregate.
10. Limestone: Means a crystalline sedimentary rock that is primarily composed of the mineral CaCO_3 . However, it may be considered as any sedimentary rock composed essentially of carbonates, chiefly Calcite or Dolomite, but may contain small amounts of iron-carbonates (Siderite).
11. Instantaneous maximum: Means the maximum value not to be exceeded at any time.
12. Monthly average concentration: Means the arithmetic average of all sample concentrations made during a calendar month.
13. Normal working hours: Means the daylight working hours Monday thru Friday excluding nationally, state, or religious observed holidays.
14. Non-discharging or recycle operation: Means a non-coal (mineral) mining operation that due to its physical makeup does not have a point discharge. In such operations all waters including stormwater runoff are directed to an operating pit that does not overflow.
15. Point Source: Means any discernable, confined, and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft, from which pollutants are or may be discharged.

DEFINITIONS OF TERMS USED IN THE NON-COAL MINERAL MINING GENERAL PERMIT

16. Pollutant: Means dredged spoil, solid waste, incinerator residue, sewage, sewage sludge, garbage, chemical, biological, or radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, industrial, municipal or agricultural waste, any substance resulting from the development, processing or recovery of any natural resource, filter backwash water, munitions, and cellar dirt.
17. Precipitation influenced discharges: Means a discharge that occurs as a result of a precipitation (rainfall or snowmelt) event.
18. Riparian Zone: Means the area of land on either side of streams, channels, rivers, and other water bodies. These areas are normally distinctly different from the surrounding lands because of unique soil and vegetation characteristics (e.g., wetter soil than adjacent soil conditions where aquatic vegetative communities thrive). For the purpose of this permit the riparian zone will be assumed to be 100 feet from the bank of the water body unless demonstrated by the permittee to be smaller.
19. Sand: Means a sedimentary rock type that implies a loosely, compacted, coarse sediment that is generally composed of particles that range in size from 1/16 mm to 2 mm. Most sands are predominantly composed of quartz grains or fragments of siliceous rocks.
20. Settleable solids: Means that matter measured by the volumetric method specified in Part I, F.2.
21. Treatment Facility/Treatment System: Means all structures which contain, convey, and as necessary, chemically or physically treat mine waters for pollutant removal. This includes all pipes, channels, ponds, basins, tanks, and all other equipment serving such structures.
22. 10-year, 24-hour precipitation events: The maximum 24-hour precipitation event with a probable recurrence interval of once in 10 years, as defined by the Kentucky Division of Water Engineering Memorandum No. 2, "Rainfall Frequency Values for Kentucky" (4-30-71) revised (6-1-79).